B1 Cont'd

short turn-forming heptapeptide (Gly-Gly-Gly-Pro-Gly-Lys-Arg). The inventors produced recombinant SIA-1 in *Escherichia coli*, refolded it, and examined its biological activity using receptor binding and glucose uptake assays. The inventors found that the receptor binding activity of SIA-1 was 12-fold higher than that of proinsulin and 3- to 4-fold lower than that of insulin. Similarly, the glucose uptake activity of SIA-1 was 16-fold higher than that of proinsulin and 4- to 5-fold lower than that of insulin. To determine whether SIA has a sufficient capability to control blood glucose in animals, as does insulin, the inventors administered SIA to 8 week-old Sprague-Dawley (SD) rats and determined the concentration of glucose in the whole blood. The inventors found that the hypoglycemic effect of SIA was 2- to 3-fold higher than that of proinsulin and 2-fold lower than that of insulin. This result indicates that the biological activity of the recombinant SIA is somewhat comparable to that of insulin.--

IN THE CLAIMS

Please add the following claims:

B2

--26. The compound of claim 1, wherein the joining peptide comprises the following sequence:

Gly-Gly-Gly-Pro-Gly-Lys-Arg (SEQ ID NO:1).--

--27. The compound of claim 1, wherein the joining peptide comprises the following sequence:

Arg-Arg-Gly-Pro-Gly-Gly-Gly (SEQ ID NO:2).--

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B2 cont'd

--28. The compound of claim 1, wherein the joining peptide comprises a sequence selected from the group consisting of:

Gly-Gly-Gly-Gly-Gly-Lys-Arg (SEQ ID NO:4),

Arg-Arg-Gly-Gly-Gly-Gly-Gly (SEQ ID NO:5),

Gly-Gly-Ala-Pro-Gly-Asp-Val-Lys-Arg (SEQ ID NO:6),

Arg-Arg-Ala-Pro-Gly-Asp-Val-Gly-Gly (SEQ ID NO:7),

Gly-Gly-Tyr-Pro-Gly-Asp-Val-Lys-Arg (SEQ ID NO:8),

Arg-Arg-Try-Pro-Gly-Asp-Val-Gly-Gly (SEQ ID NO:9),

Gly-Gly-His-Pro-Gly-Asp-Val-Lys-Arg (SEQ ID NO:10), and

Arg-Arg-His-Pro-Gly-Asp-Val-Gly-Gly (SEQ ID NO:11).—

Attached hereto is a marked up version showing the changes made to the application by this Reply.

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